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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,468	06/29/2001	Alexey S. Kabalnov	10003878 -1	6545

7590 03/25/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

TRAN, LY T

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/895,468

Applicant(s)

KABALNOV ET AL.

Examiner

Ly T TRAN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/3/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 9-15 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No.

12/3/03

Note: species 1, group 1: claim 1-8 not 1-9 as indicated in the last office action as a typo.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) in view of Pfaff et al (USPN 6,357,868).

Tognetti et al. discloses a method for printing on an article using any types of printing process (Page 2: line 3-15) comprising:

- Applying a fluid glazing material to an article creating a coating surface on the article, the fluid glazing material contains an under-printing agent (Page 2: line 33-35);

- Applying a chromophore-containing fluid onto the coated surface, the fluid primer contacts the chromophore-containing fluid (Page 2: line 36-40);
- Firing the article (Page 2: line 41);
- The chromophore containing fluid comprise a transition metal salt (Page 2: line 77);
- Transfer medium (Page 2: line 13);
- The article is a ceramic (Page 2: line 19-21).

Tognetti et al. discloses the claimed invention except that using direct printing instead of ink jet printing. Pfaff shows that direct printing and inkjet printing is an equivalent structure known in the art (column 2: line 35-42). Therefore, because direct printing and inkjet printing were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute ink jet printing for directing.

3. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) in view of Pfaff et al (USPN 6,357,868) as applied to claims 1-5 above, and further in view of Yokoyama et al. (USPN 4,256,493).

The combination of Tognetti et al and Pfaff et al. fails to teach the transition metal salt is selected from the group consisting of nitrates, chlorides, acetates, chromates, citrates, sulfates and combinations thereof.

Yokoyama et al. teaches the transition metal salt is selected from the group consisting of acetates, nitrates and chlorides (Column 6: line 5-8).

It would have been obvious to one having skill in the art at the time the invention was made as modify to have select from the group consisting of acetates, nitrates and chlorides as taught by Yokoyama et al. The motivation of doing so is to improve the light-resistance in the presence of a water-soluble ultraviolet absorbing agent (Yokoyama USPN 4,256,493, Column 5: line 1-4).

4. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) in view of Pfaff et al. (USPN 6,357,868) as applied to claims 1-5 above, and further in view of Daniels (USPN 4,136,076).

The combination of Tognetti et al and Pfaff et al fails to teach the metal ion provided by the transition metal sulfate salt selected from the group consisting of cobalt, iron, chromium, copper, manganese, nickel, uranium, lead, gold, molybdenum, silver, tin, vanadium, cesium, neodymium and combinations thereof.

Daniels teaches the metal ion provided by the transition metal sulfate salt is selected from the group consisting of cobalt, nickel and tin.

It would have been obvious to one having skill in the art at the time the invention was made as modify to have the metal ion provided by the transition metal sulfate salt selected from the group consisting of cobalt, nickel and tin as taught by Daniels. The motivation of doing so is to obtain fast drying with good extended print quality (Daniels USPN 4,136,076, Column 3: line 59-60).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) in view of Pfaff et al. (USPN 5,357,868) as applied to claim 1 above, and further in view of Gelbart (USPN 6,283,589).

The combination of Tognetti et al and Pfaff et al fails to teach an additional coating selected from a group consisting of a glaze, an adhesive, a colorant, and a reflective material is applied.

Gelbart teaches an additional coating selected from a group consisting of a glaze (Column 4: line 31-35).

It would have been obvious to one having skill in the art at the time the combined invention was made as modify to use using an additional coating as taught by Gelbart. The motivation of doing so is to providing a protection layer therefore obtain a high quality printing.

### ***Response to Arguments***

6. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments filed 12/3/03 have been fully considered but they are not persuasive.

Applicant's argument that Daniel does not teach metal sulfate salt is not persuasive because metal ion such as cobalt, nickel, tin is considered as metal sulfate salt. Therefore, Daniel meets the limitation of the claim.

Applicant's argument that Gelbart does not teach that the layer is added prior to firing is not persuasive because refer to Tognetti, discloses to coat the article, applying

a chromophore-containing fluid onto the coated surface then firing the article while Gelbart teaches in the example 3 is spraying an coating after printing on the coating sheet. It would have been obvious to spray a coating on the article after applying a chromophore-containing fluid onto the coated surface then firing the article. Therefore, Tognette and Gelbart meet the limitation of the claim.

### ***Conclusion***

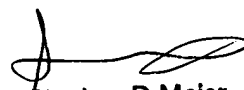
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



March 11, 2004



Stephen D. Meier  
Primary Examiner